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PTO/SB/08A (10/01) (Substitute for form 1449A/PTO)  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use several sheets if necessary)  Sheet 1 of 3	ATTY. DOCKET NO. HAU199 CON Client/Matter No. 8250.0040.001	APPLICATION NO. 10/001,880
	FIRST NAMED INVENTOR David T. Bailey, et al.	
	FILING DATE November 16, 2001	ART UNIT 1764

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document No. No. - Kind Code	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Doc	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
WG	1	US-3,989,757	11/02/1976	Joseph Donald Surmatis	
WG	2	US-4,115,949	09/26/1978	Avron, et al.	
WG	3	US-4,199,895	04/29/1980	Avron, et al.	
WG	4	US-4,439,629	03/27/1984	Ruegg, et al.	
WG	5	US-4,554,390	11/19/1985	Curtain, et al.	
WG	6	US-4,680,314	07/14/1987	Nonomura, et al.	
WG	7	US-4,713,398	12/15/1987	Nonomura, et al.	
WG	8	US-5,310,554	05/10/1994	Haigh, W. Geoffrey	
WG	9	US-5,328,845	07/12/1994	Finkelstein, et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Doc cntry code - No. - Kind Code	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Doc	Pages, Columns. Lines Where Relevant Passages or Relevant Figures Appear	TRANSLATION	
WG	10	WO 93/24454	12/9/1993	Betatene, Ltd.		YES	NO
WG	11	GB/2218989A	12/15/1988	Institut Penyelidikan Minyak			

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (In CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s) publisher, city and/or country where published
WG	12	DOERING, LEVENTIS, and ROTH, "Thermal Interconversions among 15-cis-, 13-cis, and all-trans- $\beta$ -Carotene: Kinetics, Arrhenius Parameters, Thermochemistry and Potential Relevance to Anticarcinogenicity of all-trans- $\beta$ -Carotene," J. Am. Chem. soc., 117:2747-2757 (1995).
WG	13	MONMA, TERAU, ITO, SAITO, and CHIKUNI, "Carotenoid Components in Soybean Seeds Varying with Seed Color and Maturation Stage," Biosci. Biotech. Biochem, 58(5):926-930 (1994).
WG	14	FABREGAS, FERRON, GAMALLO, VECINO, OTERO, and HERRERO, "Improvement of Growth Rate and Cell Productivity by Aeration Rate in Cultures of the Marine Microalga Dunaliella Tertiolecta," Bioresource Technology 48:107-111 (1994).
WG	15	CHEN, CHEN, and CHIEN, "Kinetic Model for Studying the Isomerization of $\alpha$ - and $\beta$ -Carotene during Heating and Illumination," J. Agric. Food Chem. 42:2391-2397 (1994).

EXAMINER SIGNATURE

*Walter D. Duff*

DATE CONSIDERED

2-18-2004

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INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

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Sheet 2 of 3

ATTY. DOCKET NO. HAU199  
CON  
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81250.0040.001

APPLICATION NO.  
10/001,880

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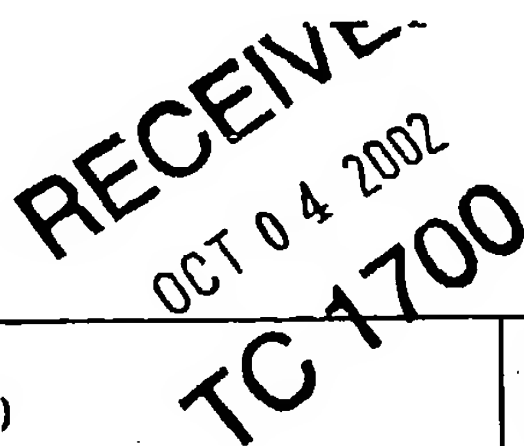
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s) publisher, city and/or country where published
WG	16	OOI, CHOO, YAP, BASIRON, and ONG, "Recovery of Carotenoids from Palm Oil," <i>JAOCS</i> , 71 (4):423-426- (1994).
WG	17	KAZARYAN, ARUTUNYAN, RIMARENKO, IVAKIN, KUDRIN, and BOBNEVA, "Method of Beta-carotene Production," Invention certificate #3302060/2813.
WG	18	SPANOS, CHEN, and SCHWARTZ, "Supercritical CO <sub>2</sub> Extraction of $\beta$ -Carotene from Sweet Potatoes," <i>J. of Food Science</i> , 58(4):817-820 (1993).
WG	19	PESEK, WARTHESEN, and TAOUKIS, "A Kinetic Model for Equilibration of Isomeric $\beta$ -Carotenes," <i>J. Agric. Food Chem.</i> , 38:41-45 (1990).
WG	20	BEN-AMOTZ, and AVRON, <i>Algal and Cyanobacterial Biotechnology</i> , "The biotechnology of mass culturing <i>Dunaliella</i> for products of commercial interest," Longman Scientific and Technical Press, 91-114 (1989).
WG	21	BOROWITZKA, and BOROWITZKA, " $\beta$ -Carotene (Provitamin A) Production with Algae," <i>Biotechnology of Vitamins, Pigments and Growth Factors</i> 15-16 (1989).
WG	22	BEN-AMOTZ, Israel Oceanographic & Limnological Research Ltd., "Chemical composition of Konatene™, 5% $\beta$ -carotene powder of <i>Dunaliella</i> microalgae, a product of Cyanotech Co., Hawaii, USA," The National Institute of Oceanography (1988).
WG	23	MAMURO, KUBOTA, SHIINA, NAKASATO, OOI, and ONG, <i>J. Jpn. Oil Chem. Soc.</i> , "Extraction of Carotenes from Palm Oil. II. Adsorption Method," 35(8):620-624 (1986).
WG	24	MAMURO, KUBOTA, SHIINA, NAKASATO, OOI, and ONG, <i>J. Jpn. Oil Chem. Soc.</i> , "Extraction of Carotenes from Palm Oil. III. Comparison of Various Adsorbents 35:620 (1986).
WG	25	BEN-AMOTZ and AVRON, <i>Plant Physiol.</i> , "On the Factors Which Determine Massive, $\beta$ -Carotene Accumulation in the Halotolerant Alga <i>dunaliella bardawil</i> ," 72:593-597 (1983).
WG	26	"Carotenoids as Colorants and Vitamin A Precursors, Technological and Nutritional Applications," edited by BAUERNFEIND, Academic Press (1981).
WG	27	Handbook of Microalgal Mass Culture, 230-234.
WG	28	BEL-AMOTZ, and AVRON, "Glycerol, $\beta$ -Carotene and Dry Algal Meal Production by Commercial Cultivation of <i>Dunaliella</i> ", <i>Algae Biomass</i> , G. Shelaf and C.J. Sueder, Editors, North-Holland Biomedical Press, 603-610 (1980).
WG	29	SEMENENKO, and ABDULLAEV, "Parametric Control of $\beta$ -Carotene Biosynthesis in <i>Dunaliella salina</i> cells Under Conditions of Intensive Cultivation," <i>Soviet Plant Physiology</i> , 27:22-30 (1980).
WG	30	"Carotenoids," ed. by OTTO ISLER, published by Birkhäuser Verlag, 63-65 (1971).
WG	31	AASEN, EIMHJELLEN, and LIAEN-JENSEN, "An Extreme Source of $\beta$ -Carotene," <i>Acta Chem. Scand.</i> 23(7): 2544-2545 (1969).
WG	32	JENSEN, <i>Acta Chem. Scand.</i> "Algal Carotenoids. III. The Oxygen Functions of Fucoxanthin," 18(3), (1964).
WG	33	CIEGLER, ARNOLD, and ANDERSON, "Microbiological Production of Carotenoids, IV. Effect of Various Grains on Production of Beta-Carotene by Mated Strains of <i>Blakeslea trispora</i> ," <i>Applied Microbiology</i> , 7(2) (1959).
WG	34	CIEGLER, ARNOLD, and ANDERSON "Microbiological Production of Carotenoids, V. Effect of Lipids and Related Substances on Production of Beta-Carotene," <i>Applied Microbiology</i> , 7(2) (1959).
WG	35	ISLER, LINDLAR, MONTAVON, RÜEGG, and ZELLER, "Synthesen in der Carotinoid-Reihe. Die technische Synthese von $\beta$ -Carotin," <i>Fasciculus I</i> , 39(27)249-259 (1956).
WG	36	"The Determination of Carotene in Green-Leaf Material, Part I. Fresh Grass," <i>Analyst</i> , 75:568-573 (1950).

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Walter D. Duff

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Sheet 3 of 3

**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

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Walter D. Dunn

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